

## Beef up entry door security

You can spend hundreds on a fancy “pick-proof” dead bolt for your entry door. But you’re kidding yourself if you think that’ll stop most burglars. The truth is, most don’t know how to pick a lock. They gain entry with one really well-placed kick or body slam that splits the doorjamb (and often the door as well), and they walk right in.



### 1 REINFORCE THE DOOR

Slide the reinforcement plate onto the door and insert the dead bolt and dead latch. Secure them with 1-1/2-in.-long stainless steel screws. Then secure the plate to the door with the matching screws from the kit.



### 2 MARK THE LATCH AND BOLT CENTERS

Extend the dead bolt slightly and close the door. Mark the center of the bolt on the edge of the doorjamb with a pencil. Then mark the center of the latch on the jamb.



### 3 ATTACH A JAMB REINFORCEMENT PLATE

Extend the pencil marks to the door stop. Then line up the center of the latch alignment hole on the reinforcement plate with the centerline mark. Slide the plate into place. Pre-drill two holes and run the supplied screws *almost all the way* into the jamb with your drill. Stop before they’re seated or you’ll bow the door frame.

You can stop burglars in their tracks by beefing up your door and jamb with reinforcing hardware. The components cost about \$120 and take about an hour to install. Here's how to do it.

Start by measuring the entry door thickness and the spacing between the entry knob and the dead bolt cylinder. Then buy either a single or a double wrap-around door reinforcement plate kit (less than \$20 at any home center or hardware store) and four 1-1/2-in.-long stainless steel wood screws. Then get a doorjamb reinforcement kit

(StrikeMaster II is one brand; \$100 from homedepot.com or amazon.com).

Remove the entry knob and dead bolt cylinder. Then remove the dead bolt and latch and toss the short screws. Install the wrap-around door reinforcement plate and reinstall the latch and dead bolt plates using the longer stainless steel screws (Photo 1). Next, mark both the latch and the dead bolt "centers" on the strike side of the jamb (Photo 2). Remove the latch and strike plates and weather stripping from the jamb. But leave any weather stripping

that's attached to the door stop. Then align the reinforcement plate, predrill a few mounting holes and add screws (Photo 3). Check the reinforcement plate alignment before snugging the screws by hand. Do not overtighten.

If the prescored dead bolt knockout lines up with the marking along the jamb, remove it and finish installing the remaining screws. If it doesn't line up, drill a new dead bolt hole with a 3/4-in. bimetal hole saw. Finally, replace two screws in each hinge with the longer screws provided in the kit.

## Sharpen your shovel

Your shovel will slice through dirt and roots easier if it has a sharp edge. If the point of your shovel is ragged with dents or chips, start by smoothing it with a grinder (Photo 1). Then switch to a mill bastard file (Photo 2) to file a bevel. You don't want a knifelike edge. Instead just bevel the top edge at a 70-degree angle to the back. That's pretty blunt compared with the 25- or 30-degree angle used for knife sharpening.



### 1 GRIND THE EDGE SMOOTH

Use a metal grinding disc in an angle grinder to remove nicks and create a smooth profile. Keep the grinder moving to avoid overheating the metal edge.



### 2 FILE A BEVEL

Hold the file at a 70-degree angle to the back of the shovel. Apply pressure while pushing the file. Lift the file to return for the next stroke. Files cut on the forward stroke only.

## Fix for a clanging vent hood damper

**Q** Every time the wind kicks up, it opens the damper on my kitchen vent hood. When the wind dies down, the damper slams shut, making a metallic "clang." The noise drives me crazy. What's the fix?

**A** New spring-loaded backdraft dampers (\$9 to \$30, depending on the size) should solve the problem. Measure the diameter of the vent pipe and order the dampers from a duct supply company (hvacquick.com is one source). Start by replacing the backdraft damper directly above the vent hood. If that doesn't solve the problem, install a second damper near the wall or roof discharge cap. The second damper will greatly reduce the clanging problem.

